From: <u>Aram Varjabedian</u>

To: Turin, David; david.burns (david.burns@state.ma.us); Joyce, Ryan (FWE)

Cc: <u>John Struzziery; Robert Scott; Bill Boornazian; bkiely</u>

Subject: RE: Hull, MA WPCF - MA0101231 - Permit exceedence - Fecal Coliform [5/12/20]

Date: Thursday, May 14, 2020 1:53:25 PM

Attachments: <u>image002.png</u>

Good afternoon:

I wanted to inform you that the Hull WPCF had a maximum daily exceedance for an effluent fecal coliform sample that was collected on Tuesday May 12, 2020. We were informed of the results from our contract lab G&L Labs, late in the afternoon on 5/13/20.

Max daily fecal coliform limit – 260 CFU / 100ml

Result for 5/13/20 - 350 CFU / 100ml

The sampling for fecal coliform and enterococci is done at the same time and the sample for fecal coliform and enterococci is collected in separate sterile 120mL specimen containers from the chlorine contact chamber channel. The sampling procedure and location are the same, as has been for prior samples collected. The chlorine residual at the time of sample collection was 1.95 mg/L and was maintaining well prior to sampling for several hours. There were no issues with disinfection or flows prior to sample collection. The effluent flow at the time of collection was 1.2 MGD.

As noted in March, for an earlier permit exceedence, [fecal was low, enterococci was high], the effluent pumps pump from the effluent wet well up to the chlorine contact tanks [CCT] and the pumping rate is based upon flows into the plant and the wet well level. Sodium hypochlorite is added into the effluent wet well before the effluent is pumped up to the CCT's. Both CCT's are currently on line. These tanks were pumped out and cleaned in April. It is possible that something microscopic may have become dislodged due to the variable flows just prior to the sampling time, as the effluent pump had cycled on and off several times, due to lower flows. All of the prior samples collected for the past several weeks for both fecal coliform and enterococci, yielded compliant results -

I reached out to the contract lab to obtain additional information, to see if all of their QA/QC requirements were met, and if there may have been a reason why the fecal coliform result was high and the enterococci result was very low. Their return reply indicated that all QA/QC was met with the duplicates being consistent and same technician performing the analysis. It is possible that something unforeseen was picked up during the sampling, or something occurred in transport or at the lab. We are also looking for other possible causes for the inconsistent results.

We collected another effluent sample today and will have the lab analyze for fecal coliform. I will provide an update tomorrow. We do not feel at this time that there is an issue with our disinfection system.

Should you have any questions or need additional information, please let me know.

Sincerely,

Aram

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